Acting Chairman Michael Copps
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Dear Chairman Copps,

Strategic visionaries, futurists and social anthropologists concur that the internet is the conduit through which a dizzying array of services, communications, learning and play is already being delivered and growing by the day.

Rather than comment on all categories, let me instead choose one, television, as it is illustrative of the promise as well as the threat to innovation that could exist without thoughtful regulation in place and soon.

The major cable companies already own the largest deployment of infrastructure in existence which came, in no small part, with significant governmental assistance to ensure unfettered granting of rights-of-way in order to build out that cable footprint.

While fiber to the home has increased dramatically in areas where population density warrants the investments, the telecom companies have not been able to compete on a level playing field since copper's capacity cannot match cable's and the investment necessary to deploy fiber is decreasingly unlikely as consumers cancel landlines in favor of mobile and VoIP options.

With internet delivery of video accelerating (see #1 below), it's clear that the cable companies have a lot at stake if competing video providers have unfettered access to the cable infrastructure.

THREE ANTI-COMPETITIVE STRATEGIC MOVES
While I truly do laud the investments the cable companies are making (e.g., my provider, Comcast, is deploying DOCSIS 3.0, and the upcoming 4.0, promising speeds of up to 160mbps up-n-down; building two new data centers in Denver, CO and Philadelphia, PA to accelerate on-demand video delivery and caching) and I completely understand that many of these investments are an absolute necessity if Comcast is to position themselves strategically.

Whatâ€™s potentially the motivation behind what Iâ€™m suspecting is an attempt by companies like Comcast to be the internet video distributors of tomorrow? One word: revenue. In Comcastâ€™s

case, more than 50% of their revenues are driven by video distribution. Comcast has zero incentive to provide an uncontrolled, level playing field for others to distribute their video content through the cable that Comcast owns.

The anti-competitive moves?

1) Creating BANDWIDTH CAPS (e.g., Comcast 250GB cap) and claiming "less than 2% of customers even come close to that cap" creating the false impression that they're being generous when, in fact, they're seeing the trendlines in video delivery (as well as an explosion of competitors from Hulu to Revision3) and are undoubtedly preparing to do battle to preserve their monopolistic hold on video distribution through their internet carrying cable infrastructure

2) AUTHENTICATION. Because of the fast growth of media center services (e.g., Boxee, PlexApp, XBMC) which allow consumers to connect a PC to their HDTV and stream internet video....to major offerings like those from Hulu, Joost and YouTube's HD quality, if the cable companies and other network providers have their way, our internet access to these competing providers will need to be â€œauthenticatedâ€ â€” verifying that the location of our internet connection also subscribes to cableTV â€” before youâ€™d be able to watch video through your internet connection.

Like most strategic moves, this â€˜authenticationâ€™ one seems benign on the surface. My provider, Comcast, seems to be primarily positioning the use of authentication only for their Hulu knockoff, Fancast, rather than for the competitive sites like Hulu itself. The way that authentication would work is that youâ€™d start streaming a cableTV subscriber-only show or movie to your computer or media center, but then find that it would only be accessible to you if you also had a cableTV subscription!

How benign is this strategic and likely anti-competitive move? In my view, itâ€™s not benign at all but rather setting the stage for the next phase of video delivery â€” already begun through the internet and accelerating rapidly â€” and for those who already control your internet connection to be in charge of what content can be delivered and whom can deliver it.

3) CACHING: Content Delivery Networks (CDNs) augment the end-to-end internetwork by distributing big digital files on a variety of servers, which then optimize content delivery to the end user by placing these files (caching 'em) closer to the places where people would consume them over Comcast's (or any ISP) network.

At the recent Minnesota High Technology Association (MHTA) Spring Conference, David Diers, Comcast VP of Business Services for Minnesota, presented on a panel about broadband.

In an answer to a question I brought forth about CDN's and caching, Mr. Diers expounded about their

local Twin Cities servers that can store "10,000 hours of video content" and that they're building "two data centers" (one in Philadelphia and one in Denver) that will allow them to "store more content locally" (i.e., in local areas like the Twin Cities metropolitan area). Though Mr. Diers was fairly clear that this initiative is intended for their Comcast On Demand service, the enormity of video files in general (and streaming video's potentially negative impact on Comcast's network) will most likely make non-Comcast on-demand videos (e.g., Hulu, AppleTV, popular YouTube ones, etc.) would make them prime candidates for local caching within Comcast's network.

This certainly sparks a lot of questions that we need clear answers to, especially from an ISP in such a controlling position:

* Will Comcast actually cache video's they don't own the rights to?

* Are there copyright issues with doing so?

* How would video caching impact a provider's ability to deploy analytics and measure usage, advertising metrics and other key performance requirements to offer a viable service?

* Would Comcast charge fees for providers to be cached, perhaps be dependent upon Comcast's analytics rather than competing ones?

* What will be the potential negative impact on innovation, from a cost, distribution and delivery perspective, on startups? With companies like Hulu, Move Networks, Revision3, Joost, TWiT.tv -- as well as the tools vendors that are already beginning to emerge due to the explosion of innovative internet video delivery -- zero foresight on regulation would mean abdicating control to the cable companies and other ISP's.

The FCC's challenge is separating the infrastructure from the applications layer and thinking about these as two, discrete layers requiring distinct regulations. Without mitigating the cable company (and other ISP's) control over which innovators and disruptors are allowed to deliver on the infrastructure, tiny and modest improvements and growth are certain to be the norm. Separating the infrastructure and applications layer holds the promise of continued internet innovation on a mass scale.

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Steve Borsch
952.486.7678

#1:According to new research, the number of global broadband households will near 440 million by 2010 and top 1.2 billion by 2030. During that same time, the number of broadband-enabled home networks will grow from 150 million in 2010 (34% of broadband homes) to more than 1.0 billion in 2030 (83% of broadband homes). With such infrastructure in place, the opportunity for broadband-enabled services - especially video - will grow dramatically.

URL:
http://www.researchandmarkets.com/reports/705752/video_enabled_home_network_nodes_a_global

#2: Minnov8.com article, "Sorry. No Internet Video for You."

URL: http://minnov8.com/2009/04/24/sorry-no-internet-video-for-you/